

**AMENDMENTS TO THE CLAIMS:**

Please amend the claims as follows:

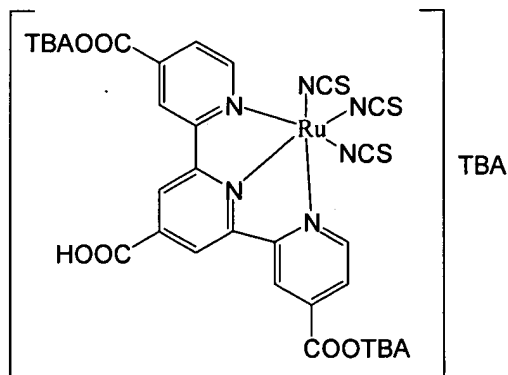
1. (Previously Presented) A dye-sensitized solar cell comprising a transparent conductive layer, a porous semiconductor layer on which a dye sensitizer is adsorbed, a carrier transport layer and a counter electrode which are formed in this order on a transparent substrate,

wherein an absorbance peak of the porous semiconductor layer is located on a shorter wavelength side of the absorbance spectrum than that of the porous semiconductor layer observed immediately after the dye sensitizer is adsorbed

wherein

the dye sensitizer is cis-bis(isothiocyanato)bis(2,2'-bipyridyl-4,4'-dicarboxylato)-ruthenium(II)bis-tetrabutylammonium and the absorbance peak of the porous semiconductor layer is located within the range of  $490 \text{ nm} \pm 35 \text{ nm}$ , or

the dye sensitizer is tris(isothiocyanato)-ruthenium(II)-2,2':6',2''-terpyridine-4,4',4''-tricarboxylic acid, tris-tetrabutylammonium salt having the formula (1):



(wherein TBA is tetrabutylammonium residual group) and the absorbance peak of the porous semiconductor layer is located within the range of  $580 \text{ nm} \pm 35 \text{ nm}$ .

2. (Original) The dye-sensitized solar cell of claim 1, wherein the porous semiconductor layer is made of titanium oxide.

Claims 3-20. (Canceled)

21. (Currently Amended) A dye sensitized solar cell comprising a transparent conductive layer, a porous semiconductor layer on which a dye sensitizer is adsorbed, a carrier transport layer and a counter electrode which is formed in this order on a transparent substrate,

wherein said porous semiconductor layer on which a dye sensitizer is adsorbed has been treated with light radiation such that an absorbance peak of the porous semiconductor layer on which a dye sensitizer is adsorbed is located on a shorter wavelength side of the absorbance spectrum after the light radiation than the absorbance peak of the semiconductor layer on which a dye sensitizer is adsorbed prior to the light radiation~~that of the porous semiconductor layer observed immediately after the dye sensitizer is adsorbed.~~

22. (Previously Presented) The dye-sensitized solar cell of claim 21, wherein the porous semiconductor layer is made of titanium oxide.

23. (Previously Presented) The dye-sensitized solar cell of claim 21, wherein the dye sensitizer is an organic dye or a metal complex dye.

24. (Previously Presented) The dye-sensitized solar cell of claim 21, wherein the dye sensitizer is cis-bis(isothiocyanato)bis(2,2'-bipyridyl-4,4'-dicarboxylato)-

ruthenium(II) and the absorbance peak of the porous semiconductor layer is located within the range of  $500 \text{ nm} \pm 30 \text{ nm}$ .

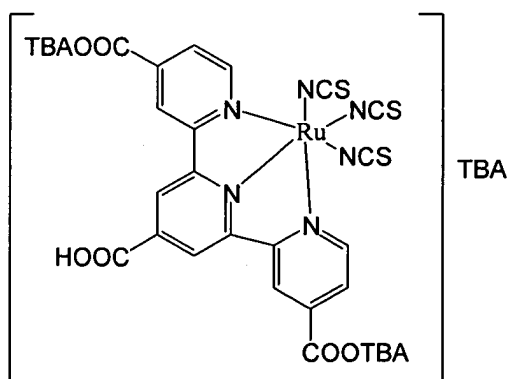
25. (Previously Presented) The dye-sensitized solar cell of claim 22, wherein the dye sensitizer is cis-bis(isothiocyanato)bis(2,2'-bipyridyl-4,4'-dicarboxylato)-ruthenium(II) and the absorbance peak of the porous semiconductor layer is located within the range of  $500 \text{ nm} \pm 30 \text{ nm}$ .

26. (Previously Presented) The dye-sensitized solar cell of claim 21

wherein

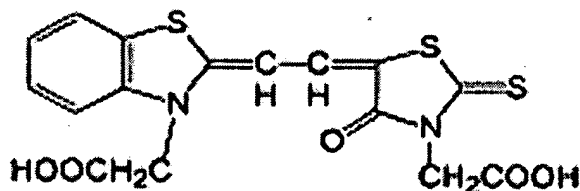
the dye sensitizer is cis-bis(isothiocyanato)bis(2,2'-bipyridyl-4,4'-dicarboxylato)-ruthenium(II)bis-tetrabutylammonium and the absorbance peak of the porous semiconductor layer is located within the range of  $490 \text{ nm} \pm 35 \text{ nm}$ , or

the dye sensitizer is tris(isothiocyanato)-ruthenium(II)-2,2':6',2''-terpyridine-4,4',4''-tricarboxylic acid, tris-tetrabutylammonium salt having the formula (1):



(wherein TBA is tetrabutylammonium residual group) and the absorbance peak of the porous semiconductor layer is located within the range of  $580 \text{ nm} \pm 35 \text{ nm}$ , or

the dye sensitizer is a compound with the following formula:

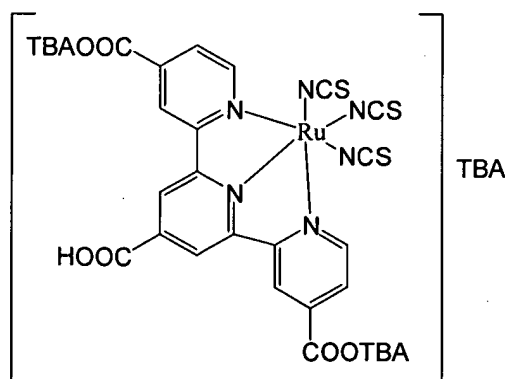


27. (Previously Presented) The dye-sensitized solar cell of claim 22

wherein

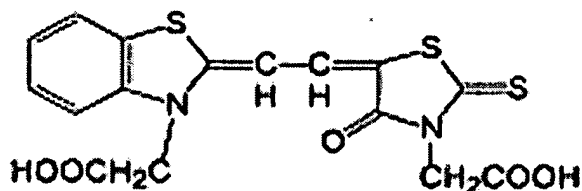
the dye sensitizer is cis-bis(isothiocyanato)bis(2,2'-bipyridyl-4,4'-dicarboxylato)-ruthenium(II)bis-tetrabutylammonium and the absorbance peak of the porous semiconductor layer is located within the range of 490 nm  $\pm$  35 nm, or

the dye sensitizer is tris(isothiocyanato)-ruthenium(II)-2,2':6',2''-terpyridine-4,4',4''-tricarboxylic acid, tris-tetrabutylammonium salt having the formula (1):



(wherein TBA is tetrabutylammonium residual group) and the absorbance peak of the porous semiconductor layer is located within the range of 580 nm  $\pm$  35 nm, or

the dye sensitizer is a compound with the following formula:



28. (Currently Amended) A dye sensitized solar cell comprising a transparent conductive layer, a porous semiconductor layer on which a dye sensitizer is adsorbed, a carrier transport layer and a counter electrode which is formed in this order on a transparent substrate,

wherein said porous semiconductor layer on which a dye sensitizer is adsorbed has been chemically treated such that an absorbance peak of the porous semiconductor layer on which a dye sensitizer is adsorbed is located on a shorter wavelength side of the absorbance spectrum after the chemical treatment than the absorbance peak of the semiconductor layer on which a dye sensitizer is adsorbed prior to the chemical treatment~~that of the porous semiconductor layer observed immediately after the dye sensitizer is adsorbed,~~

wherein the chemical treatment is carried out by immersing the porous semiconductor layer in a solution containing at least one compound selected from the group consisting of furan, tetrahydrofuran, dioxole, dioxolan, thiophene, tetrahydrothiophene, pyrrole, imidazole, pyran, tetrahydropyran, dioxene, dioxane, dioxine, trioxane, quinolizine, quinoxaline, quinoline, 2-methylbenzothiazole, 2-methylbenzoxazole, carbazole, carboline, phenazine, imidazoles, ethylimidazolium

iodide, ethylmethylimidazolium iodide, methylpropylimidazolium iodide,  
dimethylpropylimidazolium iodide and hexylmethylimidazolium iodide, heteroatom-  
~~containing cycle compound~~ after the dye sensitizer is adsorbed on the porous  
semiconductor layer,

wherein an amount of the solution is at least 30 times as much as that of the  
porous semiconductor layer by volume.

29. (Previously Presented) The dye-sensitized solar cell of claim 28, wherein the  
porous semiconductor layer is made of titanium oxide.

30. (Previously Presented) The dye-sensitized solar cell of claim 28, wherein the  
dye sensitizer is an organic dye or a metal complex dye.

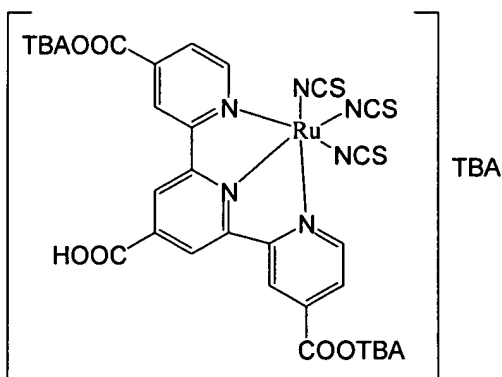
31. (Previously Presented) The dye-sensitized solar cell of claim 28, wherein the  
dye sensitizer is cis-bis(isothiocyanato)bis(2,2'-bipyridyl-4,4'-dicarboxylato)-  
ruthenium(II) and the absorbance peak of the porous semiconductor layer is located  
within the range of 500 nm  $\pm$  30 nm.

32. (Previously Presented) The dye-sensitized solar cell of claim 29, wherein the  
dye sensitizer is cis-bis(isothiocyanato)bis(2,2'-bipyridyl-4,4'-dicarboxylato)-  
ruthenium(II) and the absorbance peak of the porous semiconductor layer is located  
within the range of 500 nm  $\pm$  30 nm.

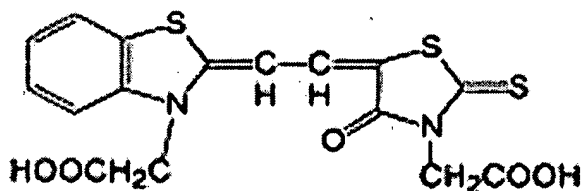
33. (Previously Presented) The dye-sensitized solar cell of claim 28  
wherein

the dye sensitizer is cis-bis(isothiocyanato)bis(2,2'-bipyridyl-4,4'-dicarboxylato)-ruthenium(II)bis-tetrabutylammonium and the absorbance peak of the porous semiconductor layer is located within the range of 490 nm  $\pm$  35 nm, or

the dye sensitizer is tris(isothiocyanato)-ruthenium(II)-2,2':6',2''-terpyridine-4,4',4''-tricarboxylic acid, tris-tetrabutylammonium salt having the formula (1):



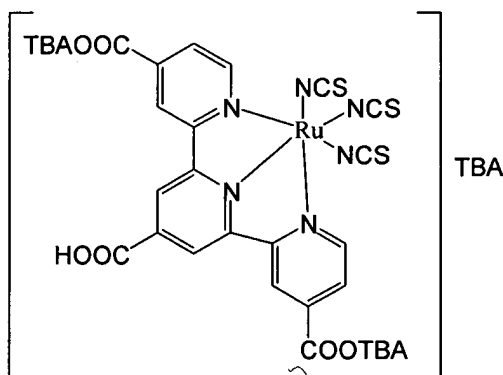
(wherein TBA is tetrabutylammonium residual group) and the absorbance peak of the porous semiconductor layer is located within the range of 580 nm  $\pm$  35 nm, or  
 the dye sensitizer is a compound with the following formula:



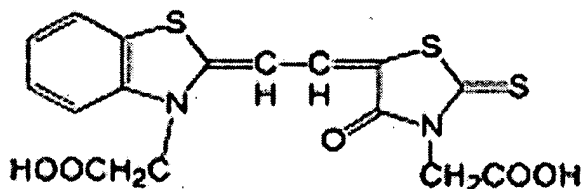
34. (Previously Presented) The dye-sensitized solar cell of claim 29  
 wherein

the dye sensitizer is cis-bis(isothiocyanato)bis(2,2'-bipyridyl-4,4'-dicarboxylato)-ruthenium(II)bis-tetrabutylammonium and the absorbance peak of the porous semiconductor layer is located within the range of  $490 \text{ nm} \pm 35 \text{ nm}$ , or

the dye sensitizer is tris(isothiocyanato)-ruthenium(II)-2,2':6',2''-terpyridine-4,4',4''-tricarboxylic acid, tris-tetrabutylammonium salt having the formula (1):



(wherein TBA is tetrabutylammonium residual group) and the absorbance peak of the porous semiconductor layer is located within the range of  $580 \text{ nm} \pm 35 \text{ nm}$ , or the dye sensitizer is a compound with the following formula:



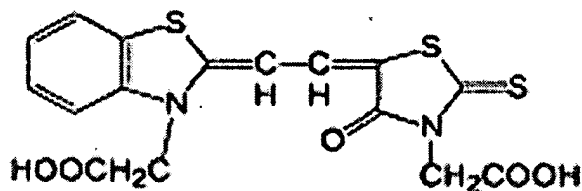
35. (Previously Presented) The dye-sensitized solar cell of claim 28, wherein the chemical treatment is carried out by immersing in the solution for 1 minute to 30 hours the porous semiconductor layer after the dye sensitizer is adsorbed.



36. (Currently Amended) A dye-sensitized solar cell comprising a transparent conductive layer, a porous semiconductor layer on which a dye sensitizer is adsorbed, a carrier transport layer and a counter electrode which are formed in this order on a transparent substrate,

wherein an absorbance peak of the porous semiconductor layer is located on a shorter wavelength side of the absorbance spectrum than that of the porous semiconductor layer absorbed immediately after the dye sensitizer is adsorbed,

wherein the dye sensitizer is a compound with the following formula



an organic dye.

37. (Previously Presented) The dye-sensitized solar cell of claim 36 wherein the porous semiconductor layer is made of titanium oxide.

Claim 38. (Canceled)